

CLAIMS:

1 1. A method for preventing at least in part a server overload comprising the steps
2 of:

3 detecting an excessive number of packets exceeding a predetermined limit;
4 sending a request to one or more of one or more routers connected to said
5 server having a privilege relationship with said server, wherein said request is a
6 request to block said excessive number of packets, and
7 blocking said excessive number of packets by one or more of said one or more
8 routers having said privilege relationship with said server for a first period of time.

1 2. The method as recited in claim 1 further comprising the step of:
2 propagating said request to block said excessive number of packets to one or
3 more neighboring routers by one or more of said one or more routers having said
4 privilege relationship with said server.

1 3. The method as recited in claim 2 further comprising the step of:
2 determining whether to block said excessive number of packets by said one or
3 more neighboring routers.

1 4. The method as recited in claim 3, wherein each of said one or more
2 neighboring routers includes a configuration file, wherein said configuration file
3 comprises information indicating whether to honor said request to block said
4 excessive number of packets.

1 5. The method as recited in claim 4, wherein if said configuration file indicates
2 to honor said request to block said excessive number of packets then the method
3 further comprises the step of:

4 blocking said excessive number of packets for a second period of time by one
5 or more of said one or more neighboring routers if said configuration file in said one

6 or more of said one or more neighboring routers indicates to honor said request to
7 block said excessive number of packets.

1 6. The method as recited in claim 5, wherein said second period of time is less
2 than said first period of time.

1 7. The method as recited in claim 3 further comprising the step of:
2 determining whether to propagate said request by said one or more
3 neighboring routers.

1 8. The method as recited in claim 7, wherein each of said one or more
2 neighboring routers includes a configuration file, wherein said configuration file
3 comprises information indicating whether to propagate said request to one or more
4 additional neighboring routers.

1 9. The method as recited in claim 8, wherein if said configuration file indicates
2 to propagate said request to said one or more additional neighboring routers then the
3 method further comprises the step of:

4 propagating said request to one or more additional neighboring routers of one
5 or more neighboring routers of said one or more neighboring routers if said
6 configuration file in said one or more neighboring routers of said one or more
7 neighboring routers indicates to propagate said request to said one or more additional
8 neighboring routers.

1 10. The method as recited in claim 1, wherein said request comprises one or more
2 of an Internet Protocol address of said server, an Internet Protocol address of a client,
3 and a port of said server.

1 11. The method as recited in claim 1, wherein each of said one or more routers
2 connected to said server includes a configuration file, wherein said configuration file
3 comprises information indicating whether a particular router has said privilege
4 relationship with said server.

1 12. The method as recited in claim 1, wherein each of said one or more routers
2 that have said privilege relationship with said server includes a configuration file,
3 wherein said configuration file comprises information indicating whether to honor
4 said request to block said excessive number of packets.

1 13. The method as recited in claim 12, wherein said one or more of said one or
2 more routers having said privilege relationship with said server block said excessive
3 number of packets for said first period of time if said configuration file in said one or
4 more of said one or more routers with said privilege relationship with said server
5 indicates to honor said request to block said excessive number of packets.

1 14. The method as recited in claim 1, wherein each of said one or more routers
2 having said privilege relationship with said server includes a configuration file,
3 wherein said configuration file comprises information indicating whether to
4 propagate said request to one or more neighboring routers.

1 15. The method as recited in claim 14, wherein if said configuration file indicates
2 to propagate said request to said one or more neighboring routers then the method
3 further comprises the step of:

4 propagating said request to one or more neighboring routers of one or more
5 routers of said one or more routers with said privilege relationship with said server if
6 said configuration file in said one or more routers of said one or more routers with
7 said privilege relationship with said server indicates to propagate said request to said
8 one or more neighboring routers.

1 16. A system, comprising:
2 a server;
3 one or more routers coupled to said server, wherein one or more of said one or
4 more routers with a privilege relationship with said server comprise circuitry for
5 blocking an excessive number of packets for a first period of time;
6 one or more clients coupled to said server by way of an Internet; and
7 one or more neighboring routers coupled to said one or more clients
8 configured to forward packets of data from said one or more clients to said server;
9 wherein said server comprises:
10 a processor;
11 a memory unit storing a computer program operable for preventing at
12 least in part an overload of said server;
13 a bus system coupling the processor to the memory unit, wherein the
14 computer program comprises the programming steps of:
15 detecting an excessive number of packets exceeding a
16 predetermined limit; and
17 sending a request to one or more of said one or more routers
18 connected to said server having said privilege relationship with said server, wherein
19 said request is a request to block said excessive number of packets.

1 17. The system as recited in claim 16, wherein one or more of said one or more
2 routers having said privilege relationship with said server comprise circuitry for:
3 propagating said request to block said excessive number of packets to one or
4 more neighboring routers.

1 18. The system as recited in claim 17, wherein said one or more neighboring
2 routers comprise circuitry for:
3 determining whether to block said excessive number of packets.

1 19. The system as recited in claim 18, wherein each of said one or more
2 neighboring routers includes a configuration file, wherein said configuration file
3 comprises information indicating whether to honor said request to block said
4 excessive number of packets.

1 20. The system as recited in claim 19, wherein if said configuration indicates to
2 honor said request to block said excessive number of packets then one or more of said
3 one or more neighboring routers comprise circuitry for:

4 blocking said excessive number of packets for a second period of time if said
5 configuration file in said one or more of said one or more neighboring routers
6 indicates to honor said request to block said excessive number of packets.

1 21. The system as recited in claim 20, wherein said second period of time is less
2 than said first period of time.

1 22. The system as recited in claim 18, wherein said one or more neighboring
2 routers further comprise circuitry for:

3 determining whether to propagate said request.

1 23. The system as recited in claim 22, wherein each of said one or more
2 neighboring routers includes a configuration file, wherein said configuration file
3 comprises information indicating whether to propagate said request to one or more
4 additional neighboring routers.

1 24. The system as recited in claim 23, wherein if said configuration indicates to
2 propagate said request to said one or more additional neighboring routers then one or
3 more neighboring routers of said one or more neighboring routers comprise circuitry
4 for:

5 propagating said request to one or more additional neighboring routers of said
6 one or more neighboring routers of said one or more neighboring routers if said
7 configuration file in said one or more neighboring routers of said one or more

8 neighboring routers indicates to propagate said request to said one or more additional
9 neighboring routers.

1 25. The system as recited in claim 16, wherein said request comprises an Internet
2 Protocol address of said server, an Internet Protocol address of a particular client of
3 said one or more clients, and a port of said server.

1 26. The system as recited in claim 16, wherein each of said one or more routers
2 connected to said server includes a configuration file, wherein said configuration file
3 comprises information indicating whether a particular router has said privilege
4 relationship with said server.

1 27. The system as recited in claim 16, wherein each of said one or more routers
2 having said privilege relationship with said server includes a configuration file,
3 wherein said configuration file comprises information indicating whether to honor
4 said request to block said excessive number of packets.

1 28. The system as recited in claim 27, wherein said one or more of said one or
2 more routers having said privilege relationship with said server block said excessive
3 number of packets for said first period of time if said configuration file in said one or
4 more of said one or more routers with said privilege relationship with said server
5 indicates to honor said request to block said excessive number of packets.

1 29. The system as recited in claim 16, wherein each of said one or more routers
2 having said privilege relationship with said server includes a configuration file,
3 wherein said configuration file comprises information indicating whether to
4 propagate said request to one or more neighboring routers.

1 30. The system as recited in claim 29, wherein if said configuration file indicates
2 to propagate said request to said one or more neighboring routers then one or more
3 routers of said one or more routers with said privilege relationship with said server
4 comprise circuitry for:

5 propagating said request to one or more neighboring routers of said one or
6 more routers of said one or more routers with said privilege relationship with said
7 server if said configuration file in said one or more routers of said one or more routers
8 with said privilege relationship with said server indicates to propagate said request to
9 said one or more neighboring routers.

1 31. A system, comprising:
2 a server;
3 one or more routers coupled to said server; and
4 one or more clients coupled to said server by way of an Internet;
5 wherein one or more of said one or more routers coupled to said server having
6 a privilege relationship with said server comprise circuitry for receiving a request,
7 wherein said request is a request to block an excessive number of packets detected by
8 said server, wherein one or more of said one or more routers having said privilege
9 relationship with said server comprise circuitry for blocking said excessive number of
10 packets for a first period of time.

1 32. The system as recited in claim 31, wherein one or more of said one or more
2 routers connected to said server having said privilege relationship comprise circuitry
3 for:
4 propagating said request to block said excessive number of packets to one or
5 more neighboring routers.

1 33. The system as recited in claim 32, wherein said one or more neighboring
2 routers comprise circuitry for:
3 determining whether to block said excessive number of packets.

1 34. The system as recited in claim 33, wherein each of said one or more
2 neighboring routers includes a configuration file, wherein said configuration file
3 comprises information indicating whether to honor said request to block said
4 excessive number of packets.

1 35. The system as recited in claim 34, wherein if said configuration indicates to
2 honor said request to block said excessive number of packets then one or more of said
3 one or more neighboring routers comprise circuitry for:

4 blocking said excessive number of packets for a second period of time if said
5 configuration file in said one or more of said one or more neighboring routers
6 indicates to honor said request to block said excessive number of packets.

1 36. The system as recited in claim 35, wherein said second period of time is less
2 than said first period of time.

1 37. The system as recited in claim 33, wherein said one or more neighboring
2 routers further comprise circuitry for:

3 determining whether to propagate said request.

1 38. The system as recited in claim 37, wherein each of said one or more
2 neighboring routers includes a configuration file, wherein said configuration file
3 comprises information indicating whether to propagate said request to one or more
4 additional neighboring routers.

1 39. The system as recited in claim 38, wherein if said configuration indicates to
2 propagate said request to said one or more additional neighboring routers then one or
3 more neighboring routers of said one or more neighboring routers comprise circuitry
4 for:

5 propagating said request to one or more additional neighboring routers of said
6 one or more neighboring routers of said one or more neighboring routers if said
7 configuration file in said one or more neighboring routers of said one or more
8 neighboring routers indicates to propagate said request to said one or more additional
9 neighboring routers.

1 40. The system as recited in claim 31, wherein each of said one or more routers
2 connected to said server includes a configuration file, wherein said configuration file
3 comprises information indicating whether a particular router has said privilege
4 relationship with said server.

1 41. The system as recited in claim 31, wherein each of said one or more routers
2 having said privilege relationship with said server includes a configuration file,
3 wherein said configuration file comprises information indicating whether to honor
4 said request to block said excessive number of packets.

1 42. The system as recited in claim 41, wherein said one or more of said one or
2 more routers having said privilege relationship with said server block said excessive
3 number of packets for said first period of time if said configuration file in said one or
4 more of said one or more routers with said privilege relationship with said server
5 indicates to honor said request to block said excessive number of packets.

1 43. The system as recited in claim 31, wherein each of said one or more routers
2 having said privilege relationship with said server includes a configuration file,
3 wherein said configuration file comprises information indicating whether to
4 propagate said request to one or more neighboring routers.

1 44. The system as recited in claim 43, wherein if said configuration file indicates
2 to propagate said request to said one or more neighboring routers then one or more
3 routers of said one or more routers with said privilege relationship with said server
4 comprise circuitry for:

5 propagating said request to one or more neighboring routers of said one or
6 more routers of said one or more routers with said privilege relationship with said
7 server if said configuration file in said one or more routers of said one or more routers
8 with said privilege relationship with said server indicates to propagate said request to
9 said one or more neighboring routers.